PEST SURVEILLANCE AND DETECTION

PROGRAM PROFILE

Goal To use the best pest survey information available to

make risk-based decisions on the presence, absence, and/or prevalence of plant pests and diseases of

phytosanitary concern to the United States.

Enabling Legislation 7 USC 147; PL 78-425. Program began in 1976

Economic Significance The U.S. is free from hundreds of foreign plant pests

and diseases. Early detection of foreign pests and diseases enables APHIS to minimize their spread, mitigate agricultural losses, and maintain pest-free

status to enhance exports of agricultural products.

Principal Approach And Methods

Used to Achieve Goals

The program conducts international cooperative surveys for varieous targeted pests in Mexico and the Caribbean islands. Program methods include the Cooperative

Agricultural Pest Survey (CAPS), which provides for the timely collection, storage, processing, and distribution of significant plant pest and disease

information. The program involves cooperative agreements with the States, surveys for selected exotic pests, and management of data on pest distribution. States enter plant pest survey results into the National

Agricultural Pest Information System (NAPIS) database. Information can be quickly retrieved by State

Departments of Agriculture, State Land Grant

Universities, and other cooperators.

History Since 1955, APHIS has encouraged surveys for

agricultural pests through cooperative programs. The

CAPS program began in 1982 with 16 States

transmitting data to a central computer. APHIS began an exotic pest pheromone trapping system in 1985 and cooperative agreements have been in effect with all 50

States since 1986.

State and Local CooperationNo matching requirement, but States devote resources

to pest survey work.

Involvement of Other Agencies

State departments of agriculture, State land grant universities, other State and Federal agencies, and agribusiness interests.

RESOURCE DATA

Obligations

	<u>Direct</u>	Reimbur	rsement <u>Use</u>	r Fees	Staff-Years
FY 1997 FY 1998 FY 1999 FY 2000 (est. FY 2001 (est.		 	 		34 31 29 30 29
Const	<u>APHIS</u>	<u>Coop</u>	<u>Total</u>	CCC	Contingency Fund
Cum.	\$101,881,785	\$36,007,941	\$137,889,726		\$88,000

RECENT ACCOMPLISHMENTS

Pest Detection

APHIS conducts detection surveys for incipient infestations of exotic pests that could cause economic damage if spread in the United States. In FY 1999, the Agency detected 334 new infestations of plant pests, compared to 250 in FY 1998. APHIS and the States participate in the National Agricultural Pest Information System (NAPIS). NAPIS provides Federal and State partners a summary database of pest survey results that are useful in tracking the spread of pests, demonstrating their absence, or planning their control. The following data shows results of some FY 1999 surveys. Examples of observations include taking grain samples for Karnal bunt, setting traps for fruit flies, or climbing in trees to look for citrus canker. A "negative" observation is when we do not find the pest or disease; a "positive" observation is when we do.

	<u>Positive</u>	<u>Negative</u>
	Observations	<u>Observations</u>
Asiatic rice borer	0	69

Caribbean fruit fly	0	95,882
Egyptian cottonworm	0	247
False codling moth	0	154
Maize and Jowar borer	0	40
Melon fly	7	74,210
Peach fruit fly	1	100,108
Rice cutworm	0	121
Asian Longhorned	2	293
Beetle		
Khapra beetle	0	31,360
Giant Salvinia	15	143
Small hive beetle	125	574
Mexican fruit fly	51	116,352
Mediterranean fruit fly	67	199,226

In addition, we conducted delimiting surveys for pests that have invaded the U.S. and may be expanding their range. These include apple ermine moth, cereal leaf beetle, citrus leaf miner, pine shoot beetle, and several other bark beetles. The program managed data for other species including gypsy moth, imported fire ant, Medfly, pink bollworm, and other cooperative program pests. Surveys for these pests support the global competitiveness of U.S. agriculture.

APHIS continued using the Cooperative Agricultural

Pest Survey (CAPS) network to conduct the Karnal Bunt (KB) National Survey in response to the 1996 detection of the disease in Arizona. By collecting extensive survey data demonstrating the limited distribution of KB in the United States, APHIS provided assurance to all trade partners that KB is not present in major wheat-producing areas of the United States, thereby insuring annual agricultural exports of up to \$5 billion and supplying the raw ingredients for domestic and foreign customers of flour, pasta, and other wheat products. Accordingly, relatively normal movement of wheat exports has continued since the beginning of the program. Negative surveys have enabled APHIS to certify that wheat being exported had originated from areas where Karnal Bunt was not present.

Karnal Bunt